We Want Your Input! Please review the following pages. If you wish, add your corrections or additions on the back of each sheet and send, and them to:

WDNR
107 Sutliff Ave.
Rhinelander, WI 54501
Attn: Kim Schertz

Please send us your corrections, omissions, or additions by September 15, 1999.

Background:
At the June 12, 1999 Forest Ecology and Management Issue Forum, the public and DNR staff, together created a list of management options, related to the forum topic. Before we began this exercise, WDNR staff experts presented information on the topics of: Regional Ecology, Community Old Growth and Restoration, Threatened and Endangered Resources, and Forestry Management. Using this information as background, we broke into small groups and developed a list of management options for one or more of the four distinct ecological areas that occur within the Brule River State Forest. These are the Lake Superior Clay Plain, the Mille Lacs Uplands, the Bois Brule Spillway and Bog, and the Bayfield Sand Plains. We have attached a map showing the locations of these four ecological units within the Brule River State Forest. For a complete description of the ecological units, please refer to the Fact Sheet on Landscape Ecology, which was included in our previous mailing. This information is also available on the DNR website at www.dnr.state.wi.us/master_planning/ or by request.

First, the groups listed all the reasonable management options for their assigned ecological unit. Then, they were asked to fill in the boxes to the right of each option and describe the various impacts of that option. WDNR staff experts were available to provide technical or scientific information if needed. If time allowed, the groups were allowed to fill in options for the other ecological units.

Due to time constraints, some groups were not able to fill in all of the boxes. At the end of the meeting, participants agreed that DNR staff should review these tables and add more detail, information, and clarification. Those DNR additions appear as underlined text. **You now have an opportunity to review these tables and send us any corrections, new ideas, omissions, or additions to the listed management outcomes and impacts as well as to our staff analysis. Feel free to add any additional management actions along with your supporting comments.**

How will this information be applied to the Master plan?
The information developed here will be utilized in the upcoming workshops, where we will develop and map a range of management alternatives. People working on the alternatives will select from the list of management options developed at the issue forums, and apply them to specific areas on a map of the forest. If necessary, additional options may be added. Thus, the list of management options developed at the issue forums will become the building blocks for the management alternatives.

Again, we thank you for taking the time to participate in the Brule River State Forest Master Plan.

Brule River State Forest – Master Plan - Forest Ecology and Management Issue Forum - June 12, 1999

List Of Management Options For:

The Lake Superior Clay Plain – Ecological Unit - Subsection 212Ja see attached map for location

Management Options: Listed below	**Shifts Area Toward: Natural Setting or Activity / Use**	**Impacts on Natural Communities**	**Impacts on Water Quality or Soil Stability**	**Impacts on Aesthetics**	**Impacts on Economic or Recreational Uses**	**Possible Management Techniques, Problems, Other Comments**
Restore to boreal forest community; white pine, white birch, white spruce	Shifts toward natural setting Restoration to a mature boreal forest community will require a very long time.	Tends to restore and improve the natural communities and historic components of forest diversity. Positive for song birds. Increases biodiversity and supports native wildlife species.	Very positive impacts on water quality and soil stability Improved? Hard to define May slightly decrease and slow the runoff. May also slightly improve soil stability	Positive impacts on aesthetics Some impact on aesthetics; Short term negative Long term positive Retaining grasslands allows more open views.	Reduces duck and grouse hunting opportunities. May reduce other game populations. May increase non-game wildlife. Decreased economic benefits from timber harvesting. Costs associated with planting	Gradually harvest aspen while leaving conifer seed trees and large hardwoods. Plant white pine, white birch, white spruce in cut aspen areas. The success rate for restoration plantings in clay soil is uncertain. The lack of existing boreal forest species seed trees and the clay soil will require plantings of larger, nursery grown trees and deer protection fencing.
Preserve existing aspen allowing a slower succession to boreal forest.	Shifts toward natural setting. Restoration to a mature boreal forest community will require 50 – 100 years.	Positive impacts on natural communities but slow in conversion. Improves natural communities	Positive impacts on water quality and soil stability but slow to change. Hard to Define	Positive impacts on aesthetics but slow to change. Aesthetics of the declining aspen may be seen a negative	Negative economic impacts and no recreational change.	Plant white pine, white birch, white spruce in openings. The lack of existing boreal forest species seed trees and the clay soil will require plantings of nursery grown trees and deer protection fencing.
Manage for white pine and red pine old growth	White Pine old growth would be appropriate. Red pine may not grow well in this area.	Preserve old trees May decrease forest species diversity	Proper use of BMP's would minimize any impacts.	Variable	Variable Reduced economic benefits from timber products.	Harvest those species other than the target 2 species. May need to plant these pines which increases cost. Survival is not certain
No Timber Harvesting	Sift to natural slowly	Improves natural community	Stable O.K.	Variable	Reduced economic benefits from timber products.	This may make it more difficult to reintroduce those species in low numbers – White Pine, White Spruce
Maintain existing grassland areas	Shifts toward activity / use.	Unnatural community for the ecological unit. Grassland supports several threatened species.	Would require erosion control measures.	No change.	Costs associated with managing the grassland area. Allows greater diversity of bird species in the area for bird watchers	Active management is needed to maintain as grassland. Current management techniques include: mowing, prescribed burning, and herbicide applications.
Designate areas of high visibility or aesthetic quality as Scenic Mgmt. Areas.	More natural	Preserves natural communities	No direst impact on soil stability or water quality	Improves aesthetics	Reduces economic benefits from timber products. Benefits tourism	

Brule River State Forest – Master Plan - Forest Ecology and Management Issue Forum - June 12, 1999

List Of Management Options For:

The Mille Lacs Uplands – Ecological Unit - Subsection 212Kb– see attached map for location

Management Options: Listed below	**More Natural or More Adapted for Human Use?**	**Impacts on Natural Communities**	**Impacts on Water Quality or Soil Stability**	**Impacts on Aesthetics / scenic quality**	**Impacts on Economics or Recreational Uses**	**Possible Management Techniques, Problems, Other Comments**
Manage for all-aged Northern Hardwood Community	More natural This would be similar to the current management.	Positive Moves towards older age classes Could include an old-growth component.	Improved water quality and soil stability Maintain riparian erosion control and avoid harvesting on steep slopes.	Improved aesthetics. Aesthetics would be maintained	Less economic benefits from timber products. Recreational and economy unchanged	True "all aged" management may require harvest every 10-15 years Selective harvest, including extended rotations. Use Passive Management, if certain sites are identified for old-growth.
Preserve existing pockets of old growth white pine and existing stands of older forest	Stays same Starts a shift to natural	Positive Maintains pockets of older communities. Unique communities could be singled out for old growth designation	Improves water quality Enhances soil stability Soil & water stability would be maintained	Maintains the existing aesthetic quality and begins to improve it.	Reduced economic benefits from timber products. Positive effects on tourism and recreation	No old-growth northern hardwoods were found in this ecological unit by WDNR's inventory staff. Create a partnership with the county expand old-growth and hardwood components
Manage for aspen and game	Would shift property toward activity/use	Monoculture Less diversity Increasing exotics and deer Results in additional forest fragmentation.	Lower water quality Possible soil and nutrient impacts—negative Erosion control measures would be required	Less desirable Aesthetics would suffer following each clearcut application Creates an unnatural appearing, high contrast edge,	More revenue Less tourist moneys More hunting Negative public opinion Increased deer & grouse hunting opportunitied	Clear-cut in small, non-adjacent patches to reduce the aesthetic impact and maintain more biological diversity.
Connect the Lenroot Ledges, the Sugar Bush Hill, Promontory, and CC Square into a single protected area.	More natural Shifts property toward the natural setting. Reduces activity levels.	Better/improved Preserves and protects important natural communities.	No change or slightly better quality	Much better, Reduces high contrast edge	Same recreation Less timber revenue	No timber harvesting in this area. Cumulative benefits by enlarging forest block size, providing more substantial habitat for forest interior wildlife, and creating linkages between several important sites / natural communities
Preserve the existing natural communities adjacent to Lake Munnesing.	More natural	Better/ improved Limited ownership and fragmentation are current limitations.	No change or slightly better quality Neutral or slight improvement	Much better	Same recreation Less timber revenue	
Designate areas of high visibility or aesthetic quality as Scenic Mgmt. Areas.	More natural	Preserves natural communities	No direst impact on soil stability or water quality	Improves aesthetics	Reduces economic benefits from timber products. Benefits tourism	

Brule River State Forest – Master Plan - Forest Ecology and Management Issue Forum - June 12, 1999

List Of Management Options For:

The Bois Brule Spillway and Bog – Ecological Unit - Subsection 212Kb– see attached map

Management Options: List below	More Natural or More Adapted for Human Use?	Impacts on Natural Communities	Impacts on Water Quality or Soil Stability	Impacts on Aesthetics	Economic or Recreational Impacts	Possible Management Techniques, Problems, Other Comments
Protect existing old growth and wetland communities	More natural Stays the same. The natural communities in the Bois Brule Spillway and Bog are currently protected	Natural Communities would be preserved Very high diversity here at community and species level. Provides secure high-quality habitat for many rare and representative species	Preserves and protects water quality and soil stability by preserving vegetation.	Preserved as natural No impacts	Long-term increased recreational potential Minimal economic impacts because little or no timber cutting is done in the spillway or bog area.	Consider use as a public education area. Designate as a Special Use Area Monitor health of natural communities Control of invasive exotic species Consider developing young stands to replace the old growth that falls or declines, Monitor – deer browse is significant. Avoid management activities that could introduce exotic species into Brule ecosystem.
Minimize erosion on side slopes of spillway and all ravines entering spillway	Shifts toward natural setting by mitigating erosion caused by human uses	Improves habitat for aquatic and riparian wildlife	Improves water quality and soil stability by mitigating surface water and sediment runoff	Improves aesthetics in areas where erosion is taking place	Costs to perform erosion control measures	Use only natural methods to stabilize Monitor results.
Protect and preserve the aesthetic, scenic, quiet and natural experience	Shifts Toward natural setting	No impacts preserves and protects natural communities	Positive/enhanced	Enhanced	Short-term negative to commercial/active users	Limit number of canoe / kayak users Restrict boom boxes Monitor
Increase educational opportunities for nature interpretation	Shifts toward activity and use if interpretive trails and signs are installed	Minimal impacts to natural communities, provided improvements are sensitively designed and installed.	Minimal impacts to soil stability and water quality	Minimal impacts to aesthetics, provided improvements are sensitively designed	Minor economic benefits from eco-tourism. Cost associated with making site improvements and possible staffing.	Need to limit number of visitors and mitigate impacts of foot traffic in Bog.
Restore the red and white pine forests, which were once supported in the terraces of the spillway	Shifts Toward natural setting	Restores to presettlement condition	Minimal impacts to soil stability and water quality	Presettlement condition is generally regarded as a more positive aesthetic	Costs to preform restoration plantings	
Designate areas of high visibility or aesthetic quality as Scenic Mgmt. Areas.	More natural	Preserves natural communities	No direst impact on soil stability or water quality	Improves aesthetics	Reduces economic benefits from timber products. Benefits tourism	

Brule River State Forest – Master Plan - Forest Ecology and Management Issue Forum - June 12, 1999

List Of Management Options For:

Bayfield Sand Plains – Ecological Unit - Subsection 212Ka see attached map for location.

Management Options: List below	**More Natural or More Adapted for Human Use?**	**Impacts on Natural Communities**	**Impacts on Water Quality or Soil Stability**	**Impacts on Aesthetics**	**Economic or Recreational Impacts**	**Possible Management Techniques, Problems, Other Comments**
Restore Jack Pine Community	Shifts to natural setting Restoration requires lot of activity Needs artificial maintenance with prescribed fire.	Sets communities back to early succession. Will increase a globally rare natural community.	Should remain similar to present.	Restoration would reduce the scenic quality in the short term (5 – 10 years), until the jack pine community establishes.	Cost of restoring and additional staffing. Reduces economic benefits from timber products.	Utilize information from Sigurd Olson NWRPC workshop on Pine Barren Restortion. Restoration techniques would include a combination of; mechanical removal of vegetation, anchor chaining, prescribed burning, and the selective application of herbicides.
Selectively thin the Red Pine to create a natural "old growth" appearance	Toward the natural	Thinning would stimulate an understory vegetative community.	Should remain similar to present.	Appearance of the exiting red pine plantations would be more natural.	Economic benefits from timber thinnings.	Consider planting white pine and other community appropriate species to enhance the biodiversity.
Increase state red pine tree farming Work with private landowners	Toward activity / use	Monocultural tree farming, limits natural communities and increases the potential for disease.	Would require BMP erosion control measures.	Creates an unnatural appearance.	Inreases economic benefits from timber products. Costs associated with planting.	
Restore a mix of barrens, jack pine, aspen, scrub oak & managed old growth red pine/white pine	Would appear and respond as a natural community mixture	Communities could be maintained where they naturally occur.	Soil stability would be maintained	Aesthetics would be well maintained	Revenue and recreation would do well under this mode of management.	Biodiversity recreational potential and economic returns would be maintained with this scenario Plant species that are compatible with the ecological unit's capability
Harvest plantation and walk away	Creates a more natural structure over a long period of time.	No longer a forest Sets communities back to early succession.	Would require BMP erosion control measures.	No trees. Create a scrub oak/brush barrens	Short term gain of pine harvest but not sustainable forestry	This will result in a scrub oak dominated ecosystem.
Total hands-off management	Yes/no	Scrub oak/red maple will dominate without disturbance		Uncertain	Reduced recreational opportunities	In areas of plantations this will result in a dense plantation of dying trees-
Recommend removal of dam from Eau Claire River above Gordon.	More natural	Recommend dam removal is data suggest it would benefit the BRSF natural communities	Improves water quality. May reduce water quantity behind dam.	Improves aesthetics of flowing river	Improves recreational uses	This dam is located outside of the forest boundary and is owned by the power company. **Water Quality Issues will be addressed at upcoming Issue Forum**
Designate areas of high visibility or aesthetic quality as Scenic Mgmt. Areas.	More natural	Preserves natural communities	No direst impact on soil stability or water quality	Improves aesthetics	Reduces economic benefits from timber products. Benefits tourism	